CLAIMS

What is claimed is:

1. A method of determining clock frequencies for first and second electronic devices installed in a system with zero or more other electronic devices, the first electronic device being connected to a first bus and the second electronic device being connected to a second bus, the method comprising:

automatically selecting a first clock frequency for the first electronic device and a second clock frequency for the second electronic device, based at least on information about the first and second electronic devices and the zero or more other electronic devices installed in the system.

2. The method of Claim 1, further comprising supplying a first clock signal having the first clock frequency to the first electronic device and supplying a second clock signal having the second clock frequency to the second electronic device.

3. The method of Claim 1, further comprising supplying a first clock signal having the first clock frequency to the first bus and supplying a second clock signal having the second clock frequency to the second bus.

4. The method of Claim 1, wherein the information about the first and second electronic devices comprises information about bandwidth characteristics of the first and second electronic devices.

5. The method of Claim 1, wherein:
the first device has a first bandwidth characteristic and the second device has a second bandwidth characteristic; and
the automatically selecting the first and second clock frequencies comprises:
if the first bandwidth characteristic is larger than the second bandwidth characteristic:
selecting a higher first clock frequency than would otherwise be selected and selecting a lower second clock frequency than would otherwise be selected; and
if the second bandwidth characteristic is larger than the first bandwidth characteristic:
selecting a higher second clock frequency than would otherwise be selected and selecting a lower first clock frequency than would otherwise be selected.

6. The method of Claim 1, wherein the information about the first and second electronic devices and the zero or more other electronic devices comprises a number of the other electronic devices installed in the system.

7. The method of Claim 1, wherein the automatically selecting a clock frequency is further based on a thermal budget for the system.

8. The method of Claim 1, wherein the automatically selecting a clock frequency is further based on a power consumption budget for the system.

9. The method of Claim 1, further comprising automatically ascertaining at least some of the information about the first and second electronic devices and the zero or more other electronic devices installed in the system.

10. The method of Claim 9, wherein the automatically ascertaining at least some of the information comprises:
querying at least one of the first and second electronic devices; and
in response to the querying, receiving information from at least one of the first and second electronic devices.

11. The method of Claim 9, wherein the automatically ascertaining at least some of the information comprises reading at least a portion of a memory.

12. The method of Claim 11, wherein the memory comprises a DIP switch.

13. The method of Claim 1, further comprising ascertaining at least some of the information about the first and second electronic devices through a user interface.

14. The method of Claim 1, wherein the information about the first and second electronic devices and the zero or more other electronic devices comprises information about an amount of heat at least one of the first and second electronic devices and the zero or more other electronic devices would generate in relation to a clock frequency at which the corresponding at least one of the first and second electronic devices and the zero or more other electronic devices would operate.

15. The method of Claim 1, wherein at least one of the first and second electronic devices is removably installed in an expansion slot.

16. The method of Claim 1, wherein at least one of the zero or more other electronic devices is removably installed in an expansion slot.

17. An article of manufacture, comprising:
    a computer-readable medium storing computer-executable instructions capable of determining clock frequencies for first and second electronic devices installed in a system with zero or more other electronic devices, the first electronic device being connected to a first bus and the second electronic device being connected to a second bus, comprising:
        automatically selecting a first clock frequency for the first electronic device and a second clock frequency for the second electronic device, based at least on information about the first and second electronic devices and the zero or more other electronic devices installed in the system.

18. A frequency manager for determining clock frequencies for first and second electronic devices installed in a system with zero or more other electronic devices, the first electronic device being connected to a first bus and the second electronic device being connected to a second bus, comprising:

a frequency calculator automatically selecting a first clock frequency for the first electronic device and a second clock frequency for the second electronic device, based at least on information about the first and second electronic devices and the zero or more other electronic devices installed in the system; and

an interface connected to the frequency calculator, to a first clock signal generator and to a second clock frequency generator, the interface sending commands:

to the first clock signal generator to generate clock signals at the first clock frequency and

to the second clock frequency generator to generate clock signals at the second clock frequency.

19. The frequency manager of Claim 18, wherein the information about the first and second electronic devices comprises information about bandwidth characteristics of the first and second electronic devices.

20. The frequency manager of Claim 18, wherein:

the first device has a first bandwidth characteristic and the second device has a second bandwidth characteristic; and

if the first bandwidth characteristic is larger than the second bandwidth characteristic:

the frequency calculator selects a higher first clock frequency than would otherwise be selected and the frequency calculator selects a lower second clock frequency than would otherwise be selected; and

if the second bandwidth characteristic is larger than the first bandwidth characteristic:

the frequency calculator selects a higher second clock frequency than would otherwise be selected and the frequency calculator selects a lower first clock frequency than would otherwise be selected.

21. The frequency manager of Claim 18, wherein the information about the first and second electronic devices and the zero or more other electronic devices comprises a number of the other electronic devices installed in the system.

22. The frequency manager of Claim 18, wherein the frequency calculator further bases the automatically selecting a first and second clock frequency on a thermal budget for the system.

23. The frequency manager of Claim 18, wherein the frequency calculator further bases the automatically selecting a first and second clock frequency on a power consumption budget for the system.

24. The frequency manager of Claim 18, further comprising an information input automatically ascertaining at least some of the information about the first and second electronic devices.

25. The frequency manager of Claim 24, wherein the information input queries at least one of the first and second electronic devices to ascertain the at least some of the information about the first and second electronic devices.

26. The frequency manager of Claim 24, further comprising a memory storing at least some of the information about the first and second electronic devices.

27. The frequency manager of Claim 26, wherein the memory comprises a DIP switch.

28. The frequency manager of Claim 18, further comprising a user interface, by which the frequency manager can ascertain at least some of the information about the first and second electronic devices.

29. The frequency manager of Claim 18, wherein the information about the first and second electronic devices and the zero or more other electronic devices comprises information about an amount of heat at least one of the first and second electronic devices and the zero or more other electronic devices would generate in relation to a clock frequency at which the corresponding at least one of the first and second electronic devices and the zero or more other electronic devices would operate.

30. The frequency manager of Claim 18, wherein at least one of the first and second electronic devices is removably installed in an expansion slot.

31. The frequency manager of Claim 18, wherein at least one of the zero or more other electronic devices is removably installed in an expansion slot.